



#3

SEQUENCE LISTING

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<120> Human Bikunin

<130> 96-223-ZZ

<140> US 09/974,026

<141> 2001-10-10

<150> US 09/144,428

<151> 1998-08-31

<150> PCT/US97/03894

<151> 1997-03-10

<150> US 08/725,251

<151> 1996-10-04

<150> US 60/019,793

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<151> 1996-03-11

<160> 105

<170> PatentIn version 3.1

<210> 1

<211> 179

<212> PRT

<213> Homo sapiens

<400> 1

Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val
1 5 10 15

Val Gly Arg Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr
20 25 30

Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser
35 40 45

Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val
50 55 60

Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp
65 70 75 80

Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser
85 90 95

Ser Asp Met Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr
100 105 110

Gly Pro Cys Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg
115 120 125

Asn Ser Cys Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn
130 135 140

Ser Tyr Arg Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln
145 150 155 160

Glu Asn Pro Pro Leu Pro Leu Gly Ser Lys Val Val Val Leu Ala Gly
165 170 175

Ala Val Ser

<210> 2
<211> 197
<212> PRT
<213> Homo sapiens

<220>
<221> SIGNAL
<222> (1)..(18)
<223>

<400> 2

Ala Gly Ser Phe Leu Ala Trp Leu Gly Ser Leu Leu Leu Ser Gly Val
1 5 10 15

Leu Ala Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser
20 25 30

Lys Val Val Gly Arg Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn
35 40 45

Val Thr Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly
 50 55 60

Asn Ser Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala
 65 70 75 80

Thr Val Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala
 85 90 95

Ala Asp Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp
 100 105 110

His Ser Ser Asp Met Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala
 115 120 125

Val Thr Gly Pro Cys Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val
 130 135 140

Glu Arg Asn Ser Cys Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn
 145 150 155 160

Lys Asn Ser Tyr Arg Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg
 165 170 175

Gln Gln Glu Asn Pro Pro Leu Pro Leu Gly Ser Lys Val Val Val Leu
 180 185 190

Ala Gly Ala Val Ser
 195

<210> 3
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 3

Ile His Asp Phe Cys Leu Val Ser Lys Val Val Gly Arg Cys Arg Ala
 1 5 10 15

Ser Met Pro Arg Trp Trp Tyr Asn Val Thr Asp Gly Ser Cys Gln Leu
 20 25 30

Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser Asn Asn Tyr Leu Thr Lys
 35 40 45

Glu Glu Cys Leu Lys Lys Cys Ala Thr Val Thr Glu Asn Ala Thr Gly
 50 55 60

Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp Ser Ser Val Pro Ser Ala
 65 70 75 80

Pro Arg Arg Gln Asp Ser Glu Asp His Ser Ser Asp Met Phe Asn Tyr
 85 90 95

Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala Ser
 100 105 110

Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn Phe
 115 120 125

Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu Glu
 130 135 140

Ala Cys Met Leu Arg Cys Phe Arg Gln
 145 150

<210> 4
 <211> 58
 <212> PRT
 <213> Homo sapiens

<400> 4

Ile His Asp Phe Cys Leu Val Ser Lys Val Val Gly Arg Cys Arg Ala
 1 5 10 15

Ser Met Pro Arg Trp Trp Tyr Asn Val Thr Asp Gly Ser Cys Gln Leu
 20 25 30

Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser Asn Asn Tyr Leu Thr Lys
 35 40 45

Glu Glu Cys Leu Lys Lys Cys Ala Thr Val
 50 55

<210> 5
 <211> 51
 <212> PRT
 <213> Homo sapiens

<400> 5

Cys Leu Val Ser Lys Val Val Gly Arg Cys Arg Ala Ser Met Pro Arg
1 5 10 15

Trp Trp Tyr Asn Val Thr Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly
20 25 30

Gly Cys Asp Gly Asn Ser Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu
35 40 45

Lys Lys Cys
50

<210> 6

<211> 58

<212> PRT

<213> Homo sapiens

<400> 6

Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala
1 5 10 15

Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn
20 25 30

Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu
35 40 45

Glu Ala Cys Met Leu Arg Cys Phe Arg Gln
50 55

<210> 7

<211> 51

<212> PRT

<213> Homo sapiens

<400> 7

Cys Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala Ser Phe Pro Arg
1 5 10 15

Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn Phe Ile Tyr Gly
20 25 30

Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu Glu Ala Cys Met
 35 40 45

Leu Arg Cys
 50

<210> 8
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 8

Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val
 1 5 10 15

Val Gly Arg Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr
 20 25 30

Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser
 35 40 45

Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val
 50 55 60

Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp
 65 70 75 80

Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser
 85 90

<210> 9
 <211> 708
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Consensus DNA sequence of human Bikunin (Fig. 3).

<220>
 <221> misc_feature
 <222> (679)..(679)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (707)..(707)
 <223> "n" is any nucleotide.

<400> 9
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ccgagaacgc agcatccacg acttctgcct ggtgtcgaag gtgggtgggca gatgccgggc 120
ctccatgcct aggtggtggt acaatgtcac tgacggatcc tgccagctgt ttgtgtatgg 180
gggctgtgac ggaaacagca ataattacct gaccaaggag gagtgcctca agaaatgtgc 240
cactgtcaca gagaatgcca cgggtgacct ggccaccagc aggaatgcag cggattcctc 300
tgtcccaagt gctcccagaa ggcaggattc tgaagaccac tccagcgata tgttcaacta 360
tgaagaatac tgcaccgcca acgcagtcac tgggccttgc cgtgcacacct tcccacgctg 420
gtactttgac gtggagagga actcctgcaa taacttcac tatggaggct gccggggcaa 480
taagaacagc taccgctctg aggaggcctg catgctccgc tgcttccgcc agcaggagaa 540
tcctcccctg ccccttggt caaagggtgt ggttctggcc ggggctgttt cgtgatggtg 600
ttgatccttt tcctggggag catccatggt cttactgatt ccgggtggca aggaggaacc 660
aggagcgtgc cctgcgganc gtctggagct tcggagatga caagggnt 708

<210> 10
<211> 197
<212> PRT
<213> Artificial Sequence

<220>
<223> Amino acids -18 to 179 of translation of consensus sequence in Fig. 3.

<400> 10

Ala Gly Ser Phe Leu Ala Trp Leu Gly Ser Leu Leu Leu Ser Gly Val
1 5 10 15

Leu Ala Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser
20 25 30

Lys Val Val Gly Arg Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn
35 40 45

Val Thr Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly
50 55 60

Asn Ser Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala
65 70 75 80

Thr Val Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala
85 90 95

Ala Asp Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp
100 105 110

His Ser Ser Asp Met Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala
115 120 125

Val Thr Gly Pro Cys Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val
130 135 140

Glu Arg Asn Ser Cys Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn
145 150 155 160

Lys Asn Ser Tyr Arg Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg
165 170 175

Gln Gln Glu Asn Pro Pro Leu Pro Leu Gly Ser Lys Val Val Val Leu
180 185 190

Ala Gly Ala Val Ser
195

<210> 11
<211> 179
<212> PRT
<213> Artificial Sequence

<220>
<223> Variants of human Bikunin.

<220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> Each "Xaa" independently represents a naturally occurring amino acid residue except Cys, with the proviso that at least one "Xaa" in SEQ ID NO:11 is different from the corresponding amino acid residue of the native sequence (see page 10 of specification).

<220>
<221> MISC_FEATURE
<222> (17)..(17)
<223> Each "Xaa" independently represents a naturally occurring amino acid residue except Cys, with the proviso that at least one "Xaa" in SEQ ID NO:11 is different from the corresponding amino acid residue of the native sequence (see page 10 of specification).

<220>
 <221> MISC_FEATURE
 <222> (19)..(19)
 <223> Each "Xaa" independently represents a naturally occurring amino acid residue except Cys, with the proviso that at least one "Xaa" in SEQ ID NO:11 is different from the corresponding amino acid residue of the native sequence (see page 10 of specification).

<220>
 <221> MISC_FEATURE
 <222> (21)..(26)
 <223> Each "Xaa" independently represents a naturally occurring amino acid residue except Cys, with the proviso that at least one "Xaa" in SEQ ID NO:11 is different from the corresponding amino acid residue of the native sequence (see page 10 of specification).

<220>
 <221> MISC_FEATURE
 <222> (40)..(40)
 <223> Each "Xaa" independently represents a naturally occurring amino acid residue except Cys, with the proviso that at least one "Xaa" in SEQ ID NO:11 is different from the corresponding amino acid residue of the native sequence (see page 10 of specification).

<220>
 <221> MISC_FEATURE
 <222> (42)..(42)
 <223> Each "Xaa" independently represents a naturally occurring amino acid residue except Cys, with the proviso that at least one "Xaa" in SEQ ID NO:11 is different from the corresponding amino acid residue of the native sequence (see page 10 of specification).

<220>
 <221> MISC_FEATURE
 <222> (45)..(47)
 <223> Each "Xaa" independently represents a naturally occurring amino acid residue except Cys, with the proviso that at least one "Xaa" in SEQ ID NO:11 is different from the corresponding amino acid residue of the native sequence (see page 10 of specification).

<220>
 <221> MISC_FEATURE
 <222> (52)..(52)
 <223> Each "Xaa" independently represents a naturally occurring amino acid residue except Cys, with the proviso that at least one "Xaa" in SEQ ID NO:11 is different from the corresponding amino acid residue of the native sequence (see page 10 of specification).

<220>

<221> MISC_FEATURE
 <222> (64)..(64)
 <223> Each "Xaa" independently represents a naturally occurring amino acid residue except Cys, with the proviso that at least one "Xaa" in SEQ ID NO:11 is different from the corresponding amino acid residue of the native sequence (see page 10 of specification).

<220>
 <221> MISC_FEATURE
 <222> (103)..(103)
 <223> Each "Xaa" independently represents a naturally occurring amino acid residue except Cys, with the proviso that at least one "Xaa" in SEQ ID NO:11 is different from the corresponding amino acid residue of the native sequence (see page 10 of specification).

<220>
 <221> MISC_FEATURE
 <222> (112)..(112)
 <223> Each "Xaa" independently represents a naturally occurring amino acid residue except Cys, with the proviso that at least one "Xaa" in SEQ ID NO:11 is different from the corresponding amino acid residue of the native sequence (see page 10 of specification).

<220>
 <221> MISC_FEATURE
 <222> (114)..(114)
 <223> Each "Xaa" independently represents a naturally occurring amino acid residue except Cys, with the proviso that at least one "Xaa" in SEQ ID NO:11 is different from the corresponding amino acid residue of the native sequence (see page 10 of specification).

<220>
 <221> MISC_FEATURE
 <222> (116)..(121)
 <223> Each "Xaa" independently represents a naturally occurring amino acid residue except Cys, with the proviso that at least one "Xaa" in SEQ ID NO:11 is different from the corresponding amino acid residue of the native sequence (see page 10 of specification).

<220>
 <221> MISC_FEATURE
 <222> (135)..(135)
 <223> Each "Xaa" independently represents a naturally occurring amino acid residue except Cys, with the proviso that at least one "Xaa" in SEQ ID NO:11 is different from the corresponding amino acid residue of the native sequence (see page 10 of specification).

<220>
 <221> MISC_FEATURE
 <222> (137)..(137)
 <223> Each "Xaa" independently represents a naturally occurring amino

acid residue except Cys, with the proviso that at least one "Xaa" in SEQ ID NO:11 is different from the corresponding amino acid residue of the native sequence (see page 10 of specification).

<220>
 <221> MISC_FEATURE
 <222> (140)..(142)
 <223> Each "Xaa" independently represents a naturally occurring amino acid residue except Cys, with the proviso that at least one "Xaa" in SEQ ID NO:11 is different from the corresponding amino acid residue of the native sequence (see page 10 of specification).

<220>
 <221> MISC_FEATURE
 <222> (147)..(147)
 <223> Each "Xaa" independently represents a naturally occurring amino acid residue except Cys, with the proviso that at least one "Xaa" in SEQ ID NO:11 is different from the corresponding amino acid residue of the native sequence (see page 10 of specification).

<220>
 <221> MISC_FEATURE
 <222> (159)..(159)
 <223> Each "Xaa" independently represents a naturally occurring amino acid residue except Cys, with the proviso that at least one "Xaa" in SEQ ID NO:11 is different from the corresponding amino acid residue of the native sequence (see page 10 of specification).

<400> 11

Ala Asp Arg Glu Arg Ser Ile Xaa Asp Phe Cys Leu Val Ser Lys Val
 1 5 10 15

Xaa Gly Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Trp Trp Tyr Asn Val Thr
 20 25 30

Asp Gly Ser Cys Gln Leu Phe Xaa Tyr Xaa Gly Cys Xaa Xaa Xaa Ser
 35 40 45

Asn Asn Tyr Xaa Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Xaa
 50 55 60

Thr Glu Asn Ala Thr Gly Asp Leu Ser Thr Ser Arg Asn Ala Ala Asp
 65 70 75 80

Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu His Asp Ser
 85 90 95

Ser Asp Met Phe Asn Tyr Xaa Glu Tyr Cys Thr Ala Asn Ala Val Xaa
100 105 110

Gly Xaa Cys Xaa Xaa Xaa Xaa Xaa Trp Tyr Phe Asp Val Glu Arg
115 120 125

Asn Ser Cys Asn Asn Phe Xaa Tyr Xaa Gly Cys Xaa Xaa Xaa Lys Asn
130 135 140

Ser Tyr Xaa Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg Xaa Gln
145 150 155 160

Glu Asn Pro Pro Leu Pro Leu Gly Ser Lys Val Val Val Leu Ala Gly
165 170 175

Ala Val Ser

<210> 12
<211> 393
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (361)..(361)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (367)..(367)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (384)..(384)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (390)..(390)
<223> "n" is any nucleotide.

<400> 12
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accgagaacg cagcatccac gacttctgcc tgggtgtcgaa ggtggtgggc agattccggg 120
 cctccatgcc taggtggtgg tacaatgtca ctgacggatc ctgccagctg tttgtgtatg 180
 ggggctgtga cggaacacgc aataattacc tgaccaagga ggagtgcctc aagaaatgtg 240
 ccactgtcac agagaatgcc acgggtgacc tggccaccag caggaatgca gcggattcct 300
 ctgtcccaag tgctcccaga aggcaggatt cttgaagacc acttcagcga tatgtttcaa 360
 ntattgnaag aataattgca ccgncaacgn att 393

<210> 13
 <211> 110
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SIGNAL
 <222> (1)..(18)
 <223>

<400> 13

Pro Gly Arg Phe Ser Pro Gly Trp Asp Arg Cys Ser Ser Leu Gly Ser
 1 5 10 15

Trp Pro Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser
 20 25 30

Lys Val Val Gly Arg Glu Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn
 35 40 45

Val Thr Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly
 50 55 60

Asn Ser Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala
 65 70 75 80

Thr Val Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala
 85 90 95

Ala Asp Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser
 100 105 110

<210> 14
 <211> 510
 <212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (424)..(424)

<223> "n" is any nucleotide.

<220>

<221> misc_feature

<222> (481)..(481)

<223> "n" is any nucleotide.

<220>

<221> misc_feature

<222> (509)..(509)

<223> "n" is any nucleotide.

<400> 14

gcaataatta cctgaccaag gaggagtgcc tcaagaaatg tgccactgtc acagagaatg 60

ccacgggtga cctggccacc agcaggaatg cagcggattc ctctgtccca agtctcccag 120

aaggcaggat tctgaagacc actccagcga tatgttcaac tatgaagaat actgcaccgc 180

caacgcagtc actgggcctt gccgtgcatc cttcccacgc tgggtactttg acgtggagag 240

gaactcctgc aataacttca tctatggagg ctgccggggc aataagaaca gctaccgctc 300

tgaggaggcc tgcattgtcc gctgcttccg ccagcaggag aatcctcccc tgccccttgg 360

ctcaaagggtg gtggttcttg ccggggctgt ttogtgatgg tgttgatcct tttcctgggg 420

agcntccatg gtcttactga ttccgggtgg caaggaggaa ccaggagcgt gccctgcgga 480

ncgtctggag cttcggagat gacaagggnt 510

<210> 15

<211> 20

<212> PRT

<213> Homo sapiens

<400> 15

Leu Pro Asp Gln Gly Gly Val Pro Gln Glu Met Cys His Cys His Arg
1 5 10 15

Glu Cys His Gly
20

<210> 16

<211> 428

<212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (3)..(3)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (11)..(12)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (17)..(17)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (48)..(48)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (425)..(425)
 <223> "n" is any nucleotide.

<400> 16
 gcngcgcggt nntcgcntgc tgggatcgct gcacctctct ggggtcgngg cggccgaccg 60
 agaacgcagc atccacgact tctgcctggt gtcgaagggt gtgggcagat gccgggcctc 120
 catgcctagg tgggtgtaca atgtcactga cggatcctgc cagctgtttg tgtatggggg 180
 ctgtgacgga aacagcaata attacctgac caaggaggag tgcctcaaga aatgtgccac 240
 tgtcacagag aatgccacgg gtgacctggc caccagcagg aatgcagcgg attcctctgt 300
 cccaagtget ccagaaggc aggattctga agaccactcc agcgatatgt tcaactatga 360
 agaatactgg caccgccaac gcattcactg ggctgcggtg catccttccc acgctggtac 420
 tttgncgt 428

<210> 17
 <211> 425
 <212> DNA
 <213> Homo sapiens

<220>

<221> misc_feature
 <222> (7)..(7)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (403)..(403)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (409)..(409)
 <223> "n" is any nucleotide.

<400> 17
 ctgggantcg ctgctcctct ctggggtcct ggcgggccgac cgagaacgca gcatccacga 60
 cttctgcctg gtgtcgaagg tgggtgggcag atgccggggcc tccatgccta ggtggtggta 120
 caatgtcact gacggatcct gccagctggt tgtgtatggg ggctgtgacg gaaacagcaa 180
 taattacctg accaaggagg agtgcctcaa gaaatgtgcc actgtcacag agaatgccac 240
 ggggtgacctg gccaccagca ggaatgcagc ggattcctct gtcccaagtg ctcccagaag 300
 gcaggattct gaagaccact ccagcgatat gttcaactat gaagaatact gcaccgcaa 360
 cgcagtcact ggggccttgc gtggaatcct ttcccacgct ggnaatttng acgttgagaa 420
 ggaac 425

<210> 18
 <211> 57
 <212> PRT
 <213> Unknown

<220>
 <223> Kunitz-like domain of tissue factor pathway inhibitor precursor 1.

<400> 18

His Ser Phe Cys Ala Phe Lys Ala Asp Asp Gly Pro Cys Lys Ala Ile
 1 5 10 15

Met Lys Arg Phe Phe Phe Asn Ile Phe Thr Arg Gln Cys Glu Glu Phe
 20 25 30

Ile Tyr Gly Gly Cys Glu Gly Asn Gln Asn Arg Phe Glu Ser Leu Glu
 35 40 45

Glu Cys Lys Lys Met Cys Thr Arg Asp
50 55

<210> 19
<211> 57
<212> PRT
<213> Unknown

<220>
<223> Kunitz-like domain of tissue factor pathway inhibitor precursor 1.
<400> 19

Pro Asp Phe Cys Phe Leu Glu Glu Asp Pro Gly Ile Cys Arg Gly Tyr
1 5 10 15

Ile Thr Arg Tyr Phe Tyr Asn Asn Gln Thr Lys Gln Cys Glu Arg Phe
20 25 30

Lys Tyr Gly Gly Cys Leu Gly Asn Met Asn Asn Phe Glu Thr Leu Glu
35 40 45

Glu Cys Lys Asn Ile Cys Glu Asp Gly
50 55

<210> 20
<211> 57
<212> PRT
<213> Unknown

<220>
<223> Kunitz-like domain of tissue factor pathway inhibitor precursor.
<400> 20

Pro Ser Trp Cys Leu Thr Pro Ala Asp Arg Gly Leu Cys Arg Ala Asn
1 5 10 15

Glu Asn Arg Phe Tyr Tyr Asn Ser Val Ile Gly Lys Cys Arg Pro Phe
20 25 30

Lys Tyr Ser Gly Cys Gly Gly Asn Glu Asn Asn Phe Thr Ser Lys Gln
35 40 45

Glu Cys Leu Arg Ala Cys Lys Lys Gly
50 55

<210> 21

<211> 57
 <212> PRT
 <213> Unknown

<220>
 <223> Kunitz-like domain of tissue factor pathway inhibitor precursor 2.

<400> 21

Ala Glu Ile Cys Leu Leu Pro Leu Asp Tyr Gly Pro Cys Arg Ala Leu
 1 5 10 15

Leu Leu Arg Tyr Tyr Tyr Arg Tyr Arg Thr Gln Ser Cys Arg Gln Phe
 20 25 30

Leu Tyr Gly Gly Cys Glu Gly Asn Ala Asn Asn Phe Tyr Thr Trp Glu
 35 40 45

Ala Cys Asp Asp Ala Cys Trp Arg Ile
 50 55

<210> 22
 <211> 57
 <212> PRT
 <213> Unknown

<220>
 <223> Kunitz-like domain of tissue factor pathway inhibitor precursor 2.

<400> 22

Pro Ser Phe Cys Tyr Ser Pro Lys Asp Glu Gly Leu Cys Ser Ala Asn
 1 5 10 15

Val Thr Arg Tyr Tyr Phe Asn Pro Arg Tyr Arg Thr Cys Asp Ala Phe
 20 25 30

Thr Tyr Thr Gly Cys Gly Asn Asn Asp Asn Asn Phe Val Ser Arg Glu
 35 40 45

Asp Ser Lys Arg Ala Cys Ala Lys Ala
 50 55

<210> 23
 <211> 57
 <212> PRT
 <213> Unknown

<220>

<223> Kunitz-like domain of amyloid precursor protein homologue.

<400> 23

Lys Ala Val Cys Ser Gln Glu Ala Met Thr Gly Pro Cys Arg Ala Val
1 5 10 15

Met Pro Arg Thr Thr Phe Asp Leu Ser Lys Gly Lys Cys Val Arg Phe
20 25 30

Ile Thr Gly Gly Cys Gly Gly Asn Arg Asn Asn Phe Glu Ser Glu Asp
35 40 45

Tyr Cys Met Ala Val Cys Lys Ala Met
50 55

<210> 24

<211> 58

<212> PRT

<213> Unknown

<220>

<223> Kunitz-like domain of aprotinin.

<400> 24

Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Lys Ala
1 5 10 15

Arg Ile Ile Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30

Phe Val Tyr Gly Gly Cys Arg Ala Lys Arg Asn Asn Phe Lys Ser Ala
35 40 45

Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

<210> 25

<211> 51

<212> PRT

<213> Unknown

<220>

<223> Kunitz-like domain of inter-alpha-trypsin inhibitor precursor.

<400> 25

Cys Gln Leu Gly Tyr Ser Ala Gly Pro Cys Met Gly Met Thr Ser Arg

[illegible]

Phe Tyr Gly Gly Cys Gly Gly Asn Arg Asn Asn Phe Asp Thr Glu Glu
 35 40 45

Tyr Cys Met Ala Val Cys Gly Ser Ala
 50 55

<210> 28
 <211> 51
 <212> PRT
 <213> Unknown

<220>
 <223> Kunitz-like domain of collagen alpha-3(VI) precursor.

<400> 28

Cys Lys Leu Pro Lys Asp Glu Gly Thr Cys Arg Asp Phe Ile Leu Lys
 1 5 10 15

Trp Tyr Tyr Asp Pro Asn Thr Lys Ser Cys Ala Arg Phe Trp Tyr Gly
 20 25 30

Gly Cys Gly Gly Asn Glu Asn Lys Phe Gly Ser Gln Lys Glu Cys Glu
 35 40 45

Lys Val Cys
 50

<210> 29
 <211> 57
 <212> PRT
 <213> Unknown

<220>
 <223> Kunitz-like domain of HKI-B9.

<400> 29

Pro Asn Val Cys Ala Phe Pro Met Glu Lys Gly Pro Cys Gln Thr Tyr
 1 5 10 15

Met Thr Arg Trp Phe Phe Asn Phe Glu Thr Gly Glu Cys Glu Leu Phe
 20 25 30

Ala Tyr Gly Gly Cys Gly Gly Asn Ser Asn Asn Phe Leu Arg Lys Glu
 35 40 45

Lys Cys Glu Lys Phe Cys Lys Phe Thr
 50 55

<210> 30
 <211> 46
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> 5' sense oligonucleotide used in Example 6.

<400> 30
 gccaaagcttg gataaaagat atgaagaata ctgcaccgcc aacgca 46

<210> 31
 <211> 35
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> 3' antisense oligonucleotide used in Example 6.

<400> 31
 ggggatcctc actgctggcg gaagcagcgg agcat 35

<210> 32
 <211> 206
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Cloned bikunin cDNA fragment in Example 6.

<400> 32
 ccaagcttgg ataaaagata tgaagaatac tgcaccgcca acgcagtcac tgggccttgc 60
 cgtgcaccc tccacgctg gtactttgac gtggagagga actcctgcaa taacttcac 120
 tatggaggct gccggggcaa taagaacagc taccgctctg aggaggcctg catgctccgc 180
 tgcttccgcc agcagtgagg atcccc 206

<210> 33
 <211> 28
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> 3' PCR primer used to amplify EST R74593.

<400> 33
 cgaagcttca tctccgaagc tccagacg 28

<210> 34
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> 5' PCR primer used to amplify EST R74593.

<400> 34
aggatctaga caataattac ctgaccaagg a

31

<210> 35
<211> 37
<212> DNA
<213> Artificial Sequence

<220>
<223> 5' PCR primer used to amplify EST R35464.

<400> 35
ggctctagagg ccgggtccgt ttctcgctg gctggga

37

<210> 36
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> 5' PCR primer used to amplify EST R34808.

<400> 36
cacctgatcg cgagacccc

19

<210> 37
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Vector specific DNA sequencing primer (SP6).

<400> 37
gatttagtg acactatag

19

<210> 38
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Vector specific DNA sequencing primer (T7).

<400> 38
 taatacgact cactataggg 20

<210> 39
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Gene specific DNA sequencing primer.

<400> 39
 ttacctgacc aaggaggagt gc 22

<210> 40
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Gene specific DNA sequencing primer.

<400> 40
 aatccgctgc attcctgctg gtg 23

<210> 41
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Gene specific DNA sequencing primer.

<400> 41
 cagtcactgg gccttgccgt 20

<210> 42
 <211> 105
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> 5' sense oligonucleotide used in Example 5.

<400> 42
 gaaggggtaa gcttgataa aagatatgaa gaatactgca ccgccaacgc agtcactggg 60

ccttgccgtg catccttccc acgctggtac tttgacgtgg agagg 105

<210> 43
 <211> 129

<212> DNA
<213> Artificial Sequence

<220>

<223> 3' antisense oligonucleotide used in Example 5.

<400> 43

cgcggatccc tactggcgga agcagcggag catgcaggcc tcctcagagc ggtagctgtt 60
cttattgccc cggcagcctc catagatgaa gttattgcag gagttcctct ccacgtcaaa 120
gtaccagcg 129

<210> 44

<211> 207

<212> DNA

<213> Artificial Sequence

<220>

<223> Cloned bikunin fragment in Example 5.

<400> 44

gaaggggtaa gcttggataa aagatatgaa gaatactgca ccgccaacgc agtcactggg 60
ccttgccgtg catccttccc acgctggtac tttgacgtgg agaggaactc ctgcaataac 120
ttcatctatg gaggctgccg gggcaataag aacagctacc gctctgagga ggctgcatg 180
ctccgctgct tccgccagta gggatcc 207

<210> 45

<211> 248

<212> PRT

<213> Artificial Sequence

<220>

<223> EST derived consensus sequence of human Bikunin (Figs. 4D and 4G).

<220>

<221> SIGNAL

<222> (1) .. (23)

<223>

<400> 45

Met Leu Arg Ala Glu Ala Asp Gly Val Ser Arg Leu Leu Gly Ser Leu
1 5 10 15

Leu Leu Ser Gly Val Leu Ala Ala Asp Arg Glu Arg Ser Ile His Asp
20 25 30

Phe Cys Leu Val Ser Lys Val Val Gly Arg Cys Arg Ala Ser Met Pro

35	40	45
Arg Trp Trp Tyr Asn Val Thr Asp Gly Ser Cys Gln Leu Phe Val Tyr		
50	55	60
Gly Gly Cys Asp Gly Asn Ser Asn Asn Tyr Leu Thr Lys Glu Glu Cys		
65	70	75 80
Leu Lys Lys Cys Ala Thr Val Thr Glu Asn Ala Thr Gly Asp Leu Ala		
	85	90 95
Thr Ser Arg Asn Ala Ala Asp Ser Ser Val Pro Ser Ala Pro Arg Arg		
	100	105 110
Gln Asp Ser Glu Asp His Ser Ser Asp Met Phe Asn Tyr Glu Glu Tyr		
	115	120 125
Cys Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala Ser Phe Pro Arg		
	130	135 140
Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn Phe Ile Tyr Gly		
145	150	155 160
Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu Glu Ala Cys Met		
	165	170 175
Leu Arg Cys Phe Arg Gln Gln Glu Asn Pro Pro Leu Pro Leu Gly Ser		
	180	185 190
Lys Val Val Val Leu Ala Gly Leu Phe Val Met Val Leu Ile Leu Phe		
	195	200 205
Leu Gly Ala Ser Met Val Tyr Leu Ile Arg Val Ala Arg Arg Asn Gln		
	210	215 220
Glu Arg Ala Leu Arg Thr Val Trp Ser Ser Gly Asp Asp Lys Glu Gln		
225	230	235 240
Leu Val Lys Asn Thr Tyr Val Leu		
	245	
<210> 46		
<211> 782		

<212> DNA
 <213> Homo sapiens

<220>
 <221> exon
 <222> (61)..(780)
 <223>

<400> 46
 acctgatcgc gagaccccaa cggctggtgg cgtcgcctgc gcgtctcggc tgagctggcc 60

 atg gcg cag ctg tgc ggg ctg agg cgg agc cgg gcg ttt ctc gcc ctg 108
 Met Ala Gln Leu Cys Gly Leu Arg Arg Ser Arg Ala Phe Leu Ala Leu
 1 5 10 15

 ctg gga tgc ctg ctc ctc tct ggg gtc ctg gcg gcc gac cga gaa cgc 156
 Leu Gly Ser Leu Leu Leu Ser Gly Val Leu Ala Ala Asp Arg Glu Arg
 20 25 30

 agc atc cac gac ttc tgc ctg gtg tgc aag gtg gtg ggc aga tgc cgg 204
 Ser Ile His Asp Phe Cys Leu Val Ser Lys Val Val Gly Arg Cys Arg
 35 40 45

 gcc tcc atg cct agg tgg tgg tac aat gtc act gac gga tcc tgc cag 252
 Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr Asp Gly Ser Cys Gln
 50 55 60

 ctg ttt gtg tat ggg ggc tgt gac gga aac agc aat aat tac ctg acc 300
 Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser Asn Asn Tyr Leu Thr
 65 70 75 80

 aag gag gag tgc ctc aag aaa tgt gcc act gtc aca gag aat gcc acg 348
 Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val Thr Glu Asn Ala Thr
 85 90 95

 ggt gac ctg gcc acc agc agg aat gca gcg gat tcc tct gtc cca agt 396
 Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp Ser Ser Val Pro Ser
 100 105 110

 gct ccc aga agg cag gat tct gaa gac cac tcc agc gat atg ttc aac 444
 Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser Ser Asp Met Phe Asn
 115 120 125

 tat gaa gaa tac tgc acc gcc aac gca gtc act ggg cct tgc cgt gca 492
 Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala
 130 135 140

 tcc ttc cca cgc tgg tac ttt gac gtg gag agg aac tcc tgc aat aac 540
 Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn
 145 150 155 160

 ttc atc tat gga ggc tgc cgg ggc aat aag aac agc tac cgc tct gag 588
 Phe Ile Tyr Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu
 165 170 175

 gag gcc tgc atg ctc cgc tgc ttc cgc cag cag gag aat cct ccc ctg 636

Glu	Ala	Cys	Met	Leu	Arg	Cys	Phe	Arg	Gln	Gln	Glu	Asn	Pro	Pro	Leu	
			180					185					190			
ccc	ctt	ggc	tca	aag	gtg	gtg	gtt	ctg	gcg	ggg	ctg	ttc	gtg	atg	gtg	684
Pro	Leu	Gly	Ser	Lys	Val	Val	Val	Leu	Ala	Gly	Leu	Phe	Val	Met	Val	
		195					200					205				
ttg	atc	ctc	ttc	ctg	gga	gcc	tcc	atg	gtc	tac	ctg	atc	cgg	gtg	gca	732
Leu	Ile	Leu	Phe	Leu	Gly	Ala	Ser	Met	Val	Tyr	Leu	Ile	Arg	Val	Ala	
	210					215					220					
cgg	agg	aac	cag	gag	cgt	gcc	ctg	cgc	acc	gtc	tgg	agc	ttc	gga	gat	780
Arg	Arg	Asn	Gln	Glu	Arg	Ala	Leu	Arg	Thr	Val	Trp	Ser	Phe	Gly	Asp	
225					230					235					240	
ga																782

<210> 47
 <211> 240
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SIGNAL
 <222> (1)..(27)
 <223>

<400> 47

Met	Ala	Gln	Leu	Cys	Gly	Leu	Arg	Arg	Ser	Arg	Ala	Phe	Leu	Ala	Leu	
1				5					10					15		
Leu	Gly	Ser	Leu	Leu	Leu	Ser	Gly	Val	Leu	Ala	Ala	Asp	Arg	Glu	Arg	
			20					25					30			
Ser	Ile	His	Asp	Phe	Cys	Leu	Val	Ser	Lys	Val	Val	Gly	Arg	Cys	Arg	
	35						40					45				
Ala	Ser	Met	Pro	Arg	Trp	Trp	Tyr	Asn	Val	Thr	Asp	Gly	Ser	Cys	Gln	
	50					55					60					
Leu	Phe	Val	Tyr	Gly	Gly	Cys	Asp	Gly	Asn	Ser	Asn	Asn	Tyr	Leu	Thr	
65					70					75					80	
Lys	Glu	Glu	Cys	Leu	Lys	Lys	Cys	Ala	Thr	Val	Thr	Glu	Asn	Ala	Thr	
				85					90					95		
Gly	Asp	Leu	Ala	Thr	Ser	Arg	Asn	Ala	Ala	Asp	Ser	Ser	Val	Pro	Ser	
		100						105						110		

Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser Ser Asp Met Phe Asn
115 120 125

Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala
130 135 140

Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn
145 150 155 160

Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu
165 170 175

Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln Glu Asn Pro Pro Leu
180 185 190

Pro Leu Gly Ser Lys Val Val Val Leu Ala Gly Leu Phe Val Met Val
195 200 205

Leu Ile Leu Phe Leu Gly Ala Ser Met Val Tyr Leu Ile Arg Val Ala
210 215 220

Arg Arg Asn Gln Glu Arg Ala Leu Arg Thr Val Trp Ser Phe Gly Asp
225 230 235 240

<210> 48
<211> 1544
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1358)..(1358)
<223> "n" is any nucleotide.

<220>
<221> exon
<222> (301)..(1056)
<223>

<400> 48
gcacgagttg ggaggtgtag cgcggctctg aacgcgctga gggccgttga gtgtcgcagg 60
cggcgagggc gcgagtgagg agcagaccca ggcatcgcg gccgagaagg ccgggcgtcc 120
ccacactgaa ggtccggaaa ggcgacttcc gggggctttg gcacctggcg gacctccc 180

gagcgtcggc acctgaacgc gaggcgctcc attgcgcgtg cgcgttgagg ggcttcccgc	240
acctgatcgc gagaccccaa cggctggtgg cgtcgcctgc gcgtctcggc tgagctggcc	300
atg gcg cag ctg tgc ggg ctg agg cgg agc cgg gcg ttt ctc gcc ctg Met Ala Gln Leu Cys Gly Leu Arg Arg Ser Arg Ala Phe Leu Ala Leu 1 5 10 15	348
ctg gga tcg ctg ctc ctc tct ggg gtc ctg gcg gcc gac cga gaa cgc Leu Gly Ser Leu Leu Leu Ser Gly Val Leu Ala Ala Asp Arg Glu Arg 20 25 30	396
agc atc cac gac ttc tgc ctg gtg tcg aag gtg gtg ggc aga tgc cgg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val Val Gly Arg Cys Arg 35 40 45	444
gcc tcc atg cct agg tgg tgg tac aat gtc act gac gga tcc tgc cag Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr Asp Gly Ser Cys Gln 50 55 60	492
ctg ttt gtg tat ggg ggc tgt gac gga aac agc aat aat tac ctg acc Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser Asn Asn Tyr Leu Thr 65 70 75 80	540
aag gag gag tgc ctc aag aaa tgt gcc act gtc aca gag aat gcc acg Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val Thr Glu Asn Ala Thr 85 90 95	588
ggc gac ctg gcc acc agc agg aat gca gcg gat tcc tct gtc cca agt Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp Ser Ser Val Pro Ser 100 105 110	636
gct ccc aga agg cag gat tct gaa gac cac tcc agc gat atg ttc aac Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser Ser Asp Met Phe Asn 115 120 125	684
tat gaa gaa tac tgc acc gcc aac gca gtc act ggg cct tgc cgt gca Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala 130 135 140	732
tcc ttc cca cgc tgg tac ttt gac gtg gag agg aac tcc tgc aat aac Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn 145 150 155 160	780
ttc atc tat gga ggc tgc cgg ggc aat aag aac agc tac cgc tct gag Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu 165 170 175	828
gag gcc tgc atg ctc cgc tgc ttc cgc cag cag gag aat cct ccc ctg Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln Glu Asn Pro Pro Leu 180 185 190	876
ccc ctt ggc tca aag gtg gtg gtt ctg gcg ggg ctg ttc gtg atg gtg Pro Leu Gly Ser Lys Val Val Val Leu Ala Gly Leu Phe Val Met Val 195 200 205	924

ttg atc ctc ttc ctg gga gcc tcc atg gtc tac ctg atc cgg gtg gca	972
Leu Ile Leu Phe Leu Gly Ala Ser Met Val Tyr Leu Ile Arg Val Ala	
210 215 220	
cgg agg aac cag gag cgt gcc ctg cgc acc gtc tgg agc tcc gga gat	1020
Arg Arg Asn Gln Glu Arg Ala Leu Arg Thr Val Trp Ser Ser Gly Asp	
225 230 235 240	
gac aag gag cag ctg gtg aag aac aca tat gtc ctg tgaccgccct	1066
Asp Lys Glu Gln Leu Val Lys Asn Thr Tyr Val Leu	
245 250	
gtcgccaaga ggactgggga agggagggga gactatgtgt gagctttttt taaatagagg	1126
gattgactcg gatttgagtg atcattaggg ctgaggtctg tttctctggg aggtaggacg	1186
gctgcttcct ggtctggcag ggatggggtt gctttggaaa tcctctagga ggctcctcct	1246
cgcattggcct gcagtctggc agcagccccg agttgtttcc tcgctgatcg atttttttcc	1306
tccaggtaga gttttctttg cttatgttga attccattgc ctctttttct cnatcacaga	1366
agtgatgttg gaatcgtttc ttttgtttgt ctgatttatg gtttttttaa gtataaacia	1426
aagtttttta ttagcattct gaaagaagga aagtaaaatg tacaagtta ataaaaaggg	1486
gccttccctt ttagaataaa tttccagcat gttgctttca aaaaaaaaaa aaaaaaaaa	1544

<210> 49
 <211> 252
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SIGNAL
 <222> (1)..(27)
 <223>

<400> 49

Met Ala Gln Leu Cys Gly Leu Arg Arg Ser Arg Ala Phe Leu Ala Leu
1 5 10 15

Leu Gly Ser Leu Leu Leu Ser Gly Val Leu Ala Ala Asp Arg Glu Arg
20 25 30

Ser Ile His Asp Phe Cys Leu Val Ser Lys Val Val Gly Arg Cys Arg
35 40 45

Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr Asp Gly Ser Cys Gln
50 55 60

Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser Asn Asn Tyr Leu Thr
65 70 75 80

Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val Thr Glu Asn Ala Thr
85 90 95

Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp Ser Ser Val Pro Ser
100 105 110

Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser Ser Asp Met Phe Asn
115 120 125

Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala
130 135 140

Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn
145 150 155 160

Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu
165 170 175

Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln Glu Asn Pro Pro Leu
180 185 190

Pro Leu Gly Ser Lys Val Val Val Leu Ala Gly Leu Phe Val Met Val
195 200 205

Leu Ile Leu Phe Leu Gly Ala Ser Met Val Tyr Leu Ile Arg Val Ala
210 215 220

Arg Arg Asn Gln Glu Arg Ala Leu Arg Thr Val Trp Ser Ser Gly Asp
225 230 235 240

Asp Lys Glu Gln Leu Val Lys Asn Thr Tyr Val Leu
245 250

<210> 50
<211> 146
<212> PRT
<213> Homo sapiens

<400> 50

Cys Leu Val Ser Lys Val Val Gly Arg Cys Arg Ala Ser Met Pro Arg

1 5 10 15
 Trp Trp Tyr Asn Val Thr Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly
 20 25 30
 Gly Cys Asp Gly Asn Ser Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu
 35 40 45
 Lys Lys Cys Ala Thr Val Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr
 50 55 60
 Ser Arg Asn Ala Ala Asp Ser Ser Val Pro Ser Ala Pro Arg Arg Gln
 65 70 75 80
 Asp Ser Glu Asp His Ser Ser Asp Met Phe Asn Tyr Glu Glu Tyr Cys
 85 90 95
 Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala Ser Phe Pro Arg Trp
 100 105 110
 Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn Phe Ile Tyr Gly Gly
 115 120 125
 Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu Glu Ala Cys Met Leu
 130 135 140

Arg Cys
 145

<210> 51
 <211> 1530
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Consensus bikunin sequence of Fig. 4C.

<220>
 <221> misc_feature
 <222> (46)..(46)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (117)..(117)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (313)..(313)
 <223> "n" is any nucleotide.

<400> 51
 gcgacctccg cgcggttgga ggtgtagcgc ggctctgaac gcgtgnaggg ccggttgagtg 60
 tcgcaggcgg cgagggcgcg agtgaggagc agaccagggc atcgcgcgcc gagaagncgg 120
 gcgtccccac actgaaggtc cggaaaggcg acttccgggg gctttggcac ctggcgggacc 180
 ctccccgagc gtcggcacct gaacgcgagg cgctccattg cgcgtgcggt tgagggggctt 240
 cccgcacctg atcgcgagac cccaacggct ggtggcgctc ctgcgcgtct cggttgagct 300
 ggccatggcg cantgttgcg ggctgaggcg gacggcgttt ctgcctgctg gggatcgctg 360
 ctctctctcg gggctctggc ggccgaccga gaacgcagca tccacgactt ctgcctgggtg 420
 tcgaagggtg tgggcagatg ccgggcctcc atgcctaggt ggtggtacaa tgtcactgac 480
 ggatcctgcc agctgtttgt gtatgggggc tgtgacggaa acagcaataa ttacctgacc 540
 aaggaggagt gcctcaagaa atgtgccact gtcacagaga atgccacggg tgacctggcc 600
 accagcagga atgcagcgga ttctctgtc ccaagtgtc ccagaaggca ggattctgaa 660
 gaccactcca gcgatatgtt caactatgaa gaatactgca ccgccaacgc agtcaactggg 720
 ccttgccgtg catccttccc acgctggtagc tttagcgtgg agaggaactc ctgcaataac 780
 ttcatctatg gaggtgccc gggcaataag aacagctacc gctctgagga ggctgcatg 840
 ctccgctgct tccgccagca ggagaatcct cccctgcccc ttgggtcaaa ggtggtgggtt 900
 ctggcggggc tgttcgtgat ggtgttgatc ctcttctctg gagcctccat ggtctacctg 960
 atccgggtgg cacggaggaa ccaggagcgt gccctgcgca ccgtctggag ctccggagat 1020
 gacaaggagc agctggtgaa gaacacatat gtctgtgac cgccctgtcg ccaagaggac 1080
 tggggaaggg aggggagact atgtgtgagc tttttttaa tagagggatt gactcggatt 1140
 tgagtgatca ttagggctga ggtctgtttc tctgggaggt aggaaggctg cttcctggtc 1200
 tggcagggat gggtttgctt tggaaatcct ctaggaggct cctcctcgca tggcctgcag 1260
 tctggcagca gccccaggtt gtttcctcgc tgatcgattt ctttctcca ggtagagttt 1320
 tctttgctta tgttgaattc cattgcctct tttctcatca cagaagtgat gttggaatcg 1380
 tttcttttgt ttgtctgatt tatggttttt ttaagtataa acaaaagttt tttattagca 1440

ttctgaaaga aggaaagtaa aatgtacaag tttaataaaa aggggccttc cccttttagaa 1500

taaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1530

<210> 52

<211> 170

<212> PRT

<213> Homo sapiens

<400> 52

Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val
1 5 10 15

Val Gly Arg Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr
20 25 30

Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser
35 40 45

Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val
50 55 60

Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp
65 70 75 80

Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser
85 90 95

Ser Asp Met Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr
100 105 110

Gly Pro Cys Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg
115 120 125

Asn Ser Cys Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn
130 135 140

Ser Tyr Arg Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln
145 150 155 160

Glu Asn Pro Pro Leu Pro Leu Gly Ser Lys
165 170

<210> 53

<211> 27
<212> PRT
<213> Homo sapiens

<400> 53

Met Ala Gln Leu Cys Gly Leu Arg Arg Ser Arg Ala Phe Leu Ala Leu
1 5 10 15

Leu Gly Ser Leu Leu Leu Ser Gly Val Leu Ala
20 25

<210> 54
<211> 23
<212> PRT
<213> Homo sapiens

<400> 54

Met Leu Arg Ala Glu Ala Asp Gly Val Ser Arg Leu Leu Gly Ser Leu
1 5 10 15

Leu Leu Ser Gly Val Leu Ala
20

<210> 55
<211> 102
<212> DNA
<213> Artificial Sequence

<220>
<223> 5' sense oligonucleotide used for construct #2 in Example 5.

<400> 55
gaaggggtaa gcttggataa aagagaagaa tactgtactg ctaatgctgt tactgggtcca 60
tgtagagctt cttttccaag atggtacttt gatgttgaaa ga 102

<210> 56
<211> 129
<212> DNA
<213> Artificial Sequence

<220>
<223> 3' antisense oligonucleotide used for construct #2 in Example 5.

<400> 56
actggatcct cattggcgaa aacatctcaa catacaggct tcttcagatc tgtaagaatt 60
tttattacct ctacaaccac cgtaaataaa attattacaa gaatttcttt caacatcaaa 120
gtaccatct 129

<210> 57
<211> 108
<212> DNA
<213> Artificial Sequence

<220>
<223> 5' sense oligonucleotide used for construct #3 in Example 5.

<400> 57
gaaggggtaa gcttggataa aagaaattac gaagaatact gtactgctaa tgctgttact 60
ggtccatgta gagcttcttt tccaagatgg tactttgatg ttgaaaga 108

<210> 58
<211> 117
<212> DNA
<213> Artificial Sequence

<220>
<223> 5' sense oligonucleotide used for construct #4 in Example 5.

<400> 58
gaaggggtaa gcttggataa aagagatatg tttaattacg aagaatactg tactgctaata 60
gctgttactg gtccatgtag agcttctttt ccaagatggg actttgatgt tgaaaga 117

<210> 59
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Sense oligonucleotide used in PCR in Example 8.

<400> 59
cacctgatcg cgagacccc 19

<210> 60
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Antisense oligonucleotide used in PCR in Example 8.

<400> 60
ctggcggaag cagcggagca tgc 23

<210> 61
<211> 45
<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide used in in vitro mutagenesis in Example 9.

<400> 61

cgcgctctcgg ctgacctggc cctgcagatg gcgcacgtgt gcggg

45

<210> 62

<211> 60

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide used in in vitro mutagenesis in Example 9.

<400> 62

ctgccccttg gctcaaagta ggaagatctt cccccgggg gggtggttct ggcggggctg

60

<210> 63

<211> 14

<212> PRT

<213> Homo sapiens

<400> 63

Leu Arg Cys Phe Arg Gln Gln Glu Asn Pro Pro Pro Leu Gly

1

5

10

<210> 64

<211> 20

<212> PRT

<213> Homo sapiens

<400> 64

Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val

1

5

10

15

Val Gly Arg Cys

20

<210> 65

<211> 20

<212> PRT

<213> Homo sapiens

<400> 65

Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys

1

5

10

15

Arg Ala Ser Phe
20

<210> 66
<211> 11
<212> PRT
<213> Homo sapiens

<400> 66

Pro Arg Tyr Val Asp Gly Ser Gln Phe Tyr Gly
1 5 10

<210> 67
<211> 55
<212> PRT
<213> Homo sapiens

<400> 67

Val Val Val Leu Ala Gly Leu Phe Val Met Val Leu Ile Leu Phe Leu
1 5 10 15

Gly Ala Ser Met Val Tyr Leu Ile Arg Val Ala Arg Arg Asn Gln Glu
20 25 30

Arg Ala Leu Arg Thr Val Trp Ser Ser Gly Asp Asp Lys Glu Gln Leu
35 40 45

Val Lys Asn Thr Tyr Val Leu
50 55

<210> 68
<211> 43
<212> PRT
<213> Homo sapiens

<400> 68

Val Val Val Leu Ala Gly Leu Phe Val Met Val Leu Ile Leu Phe Leu
1 5 10 15

Gly Ala Ser Met Val Tyr Leu Ile Arg Val Ala Arg Arg Asn Gln Glu
20 25 30

Arg Ala Leu Arg Thr Val Trp Ser Phe Gly Asp
35 40

<210> 69
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 69

Val Val Val Leu Ala Gly Leu Phe Val Met Val Leu Ile Leu Phe Leu
 1 5 10 15

Gly Ala Ser Met Val Tyr Leu Ile Arg Val Ala Arg Arg Asn Gln Glu
 20 25 30

Arg Ala Leu Arg Thr Val Trp Ser Ser Gly Asp Asp Lys Glu Gln Leu
 35 40 45

Val Lys Asn Thr Tyr Val Leu
 50 55

<210> 70
 <211> 213
 <212> PRT
 <213> Homo sapiens

<400> 70

Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val
 1 5 10 15

Val Gly Arg Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr
 20 25 30

Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser
 35 40 45

Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val
 50 55 60

Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp
 65 70 75 80

Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser
 85 90 95

Ser Asp Met Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr
 100 105 110

Gly Pro Cys Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg
 115 120 125

Asn Ser Cys Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn
 130 135 140

Ser Tyr Arg Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln
 145 150 155 160

Glu Asn Pro Pro Leu Pro Leu Gly Ser Lys Val Val Val Leu Ala Gly
 165 170 175

Leu Phe Val Met Val Leu Ile Leu Phe Leu Gly Ala Ser Met Val Tyr
 180 185 190

Leu Ile Arg Val Ala Arg Arg Asn Gln Glu Arg Ala Leu Arg Thr Val
 195 200 205

Trp Ser Phe Gly Asp
 210

<210> 71
 <211> 225
 <212> PRT
 <213> Homo sapiens

<400> 71

Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val
 1 5 10 15

Val Gly Arg Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr
 20 25 30

Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser
 35 40 45

Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val
 50 55 60

Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp
 65 70 75 80

Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser
85 90 95

Ser Asp Met Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr
100 105 110

Gly Pro Cys Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg
115 120 125

Asn Ser Cys Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn
130 135 140

Ser Tyr Arg Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln
145 150 155 160

Glu Asn Pro Pro Leu Pro Leu Gly Ser Lys Val Val Val Leu Ala Gly
165 170 175

Leu Phe Val Met Val Leu Ile Leu Phe Leu Gly Ala Ser Met Val Tyr
180 185 190

Leu Ile Arg Val Ala Arg Arg Asn Gln Glu Arg Ala Leu Arg Thr Val
195 200 205

Trp Ser Ser Gly Asp Asp Lys Glu Gln Leu Val Lys Asn Thr Tyr Val
210 215 220

Leu
225

<210> 72
<211> 19
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (9)..(9)
<223> "Xaa" is Ile, Thr, Asn, or Ser.

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> "Xaa" is Val, Ala, Glu, or Gly.

<220>
 <221> MISC_FEATURE
 <222> (17)..(17)
 <223> "Xaa" is Ser, Pro, Thr, or Ala.

<220>
 <221> MISC_FEATURE
 <222> (19)..(19)
 <223> "Xaa" is Tyr, His, Asn, or Asp.

<400> 72

Arg Pro Leu Gln Arg Tyr Val Ser Xaa Ile Xaa Arg Ile Ile Ala Pro
 1 5 10 15

Xaa Thr Xaa

<210> 73
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 73

Pro Gly His Gln Gln Glu Cys Ser Gly Phe Leu Cys Pro Lys Ser Pro
 1 5 10 15

Arg Arg Gln Asp Ser Glu Asp His Ser Ser Asp Met Phe Asn Tyr Glu
 20 25 30

Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala Ser Phe
 35 40 45

Pro Arg Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn Phe Ile
 50 55 60

Tyr Gly Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu Glu Ala
 65 70 75 80

Cys Met Leu Arg Cys Phe Arg Gln Gln Glu Asn Pro Pro Leu Pro Leu
 85 90 95

Gly Ser Lys Val Val Val Leu Ala Gly Ala Val Ser
 100 105

<210> 74
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MISC_FEATURE
 <222> (25)..(25)
 <223> "Xaa" is Asp or Glu.

<400> 74

Ser Phe Ser Trp Gly Ala Ser Met Val Leu Leu Ile Pro Gly Gly Lys
 1 5 10 15

Glu Glu Pro Gly Ala Cys Pro Ala Xaa Arg Leu Glu Leu Arg Arg
 20 25 30

<210> 75
 <211> 511
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Corrected version of EST R74593 (see Fig. 3 and page 28).

<220>
 <221> misc_feature
 <222> (425)..(425)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (482)..(482)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (510)..(510)
 <223> "n" is any nucleotide.

<400> 75
 gcaataatta cctgaccaag gaggagtgcc tcaagaaatg tgccactgtc acagagaatg 60
 ccacgggtga cctggccacc agcaggaatg cagcggattc ctctgtccca agtgctccca 120
 gaaggcagga ttctgaagac cactccagcg atatgttcaa ctatgaagaa tactgcaccg 180
 ccaacgcagt cactgggcct tgccgtgcat ccttcccacg ctggtacttt gacgtggaga 240
 ggaactcctg caataacttc atctatggag gctgccgggg caataagaac agctaccgct 300

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ctgaggagggc ctgcatgctc cgctgcttcc gccagcagga gaatcctccc ctgccccttg      360
gctcaaaggt ggtggttctg gccggggctg tttcgtgatg gtgttgatcc ttttcctggg      420
gagcntccat ggtcttactg attccgggtg gcaaggagga accaggagcg tgcctgcgg      480
ancgtctgga gcttcggaga tgacaagggn t                                     511

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<210> 76
<211> 31
<212> PRT
<213> Artificial Sequence

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<220>
<223> Amino acids 184-214 of translation of consensus sequence in Fig. 3.

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<220>
<221> MISC_FEATURE
<222> (25)..(25)
<223> "Xaa" is Asp or Glu.

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<400> 76

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Ser Phe Ser Trp Gly Ala Ser Met Val Leu Leu Ile Pro Gly Gly Lys
1           5           10           15

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Glu Glu Pro Gly Ala Cys Pro Ala Xaa Arg Leu Glu Leu Arg Arg
          20           25           30

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<210> 77
<211> 312
<212> DNA
<213> Homo sapiens

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<220>
<221> misc_feature
<222> (45)..(45)
<223> "n" is any nucleotide.

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<220>
<221> misc_feature
<222> (49)..(49)
<223> "n" is any nucleotide.

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<220>
<221> misc_feature
<222> (118)..(118)
<223> "n" is any nucleotide.

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<220>
 <221> misc_feature
 <222> (231)..(231)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (305)..(305)
 <223> "n" is any nucleotide.

<400> 77
 gcgacctccg cgcggttgga ggtgtagcgc ggctctgaac gcgtngagng gccgttgagt 60
 gtcgcaggcg gcgagggcgc gagtgaggag cagacccagg catcgcgcgc cgagaagncg 120
 ggcgccccca cactgaaggt ccggaaaggc gacttccggg ggctttggca cctggcggac 180
 cctcccggag cgtcggcacc tgaacgcgag gcgctccatt gcgcgtgcgt ntgaggggct 240
 tcccgcacct gatcgcgaga cccaacggc tggtggcgtc gcctgcgcgt ctcggtgag 300
 ctggncatgt cg 312

<210> 78
 <211> 330
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (117)..(117)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (123)..(123)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (321)..(321)
 <223> "n" is any nucleotide.

<400> 78
 gcgacctccg cgcggttgga ggtgtagcgc ggctctgaac gcgtgcaggg ccgttgagtg 60
 tcgcaggcgg cgagggcgcg agtgaggagc agacccaggc atcgcgcgcc gagaagncgg 120
 gcntccccac actgaaggtc cggaagggc acttccggg gctttggcac ctggcggacc 180
 ctcccggagc gtggcacctg aacgcgaggc gctccattgc gcgtgcgttt gaggggcttc 240

ccgcacctga tcgcgagacc ccaacggctg gtggcgctgc ctgcgcgtct cggtgagct 300
ggccatggcg cactgtgcgg ngctgaggcg 330

<210> 79
<211> 283
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)..(9)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (11)..(11)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (222)..(222)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (231)..(231)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (262)..(262)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (267)..(274)
<223> "n" is any nucleotide.

<400> 79
ttgagtgtng naggcggcga gggcgcgagt gaggagcaga cccaggcatc gcgcgccgag 60
aaggccgggc gtccccacac tgaagggtccg gaaaggcgac ttccgggggc tttggcacct 120
ggcggaccct cccggagcgt cggcacctga acgcgaggcg ctccattgcg cgtgcgtttg 180
aggggcttcc cgcacctgat cgcgagaccc caacggctgg tngcgtcgct ncgcgtctcg 240
gctgagcttg gccatggcgc antgttnccg gctnaggcgg acg 283

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<210> 80
<211> 423
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (44)..(44)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (46)..(46)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (76)..(76)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (114)..(114)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (187)..(187)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (268)..(268)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (309)..(309)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (317)..(317)
<223> "n" is any nucleotide.

<220>
<221> misc_feature

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<222> (332)..(332)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (370)..(370)
 <223> "n" is any nucleotide.

<400> 80
 ggcgacctcc gcgcgttggg aggtgtagcg cgctctgaac gggnggggc cgttgagtgt 60
 cgcaggcggc agggcngagt gaggagcaga cccaggcatc gcgcgccgag aagncgggcg 120
 tccccacact gaaggtccgg aaaggcgact tccgggggct ttggcacctg gcggacgtcc 180
 cggagcnggc acctgaacgc gaggcgctcc attgcgcgtg cgtttgaggg gcttcccgca 240
 cctgatcgcg agacccaac ggctggtngc gtcgctggcg cgttctcggc tgagctggcc 300
 atggcgcant gttgcgngct gaggcggacc gncgtttttc ttcgccttgc tgggattcgc 360
 ttgcttcctn tctggggggt cctgggcggc cgaccgagaa cgcagcatcc aagaattttt 420
 gcc 423

<210> 81
 <211> 344
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (35)..(35)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (148)..(148)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (235)..(235)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (261)..(261)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (272)..(272)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (293)..(293)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (300)..(300)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (313)..(313)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (320)..(320)
 <223> "n" is any nucleotide.

<400> 81
 ggaggagcag acccaggcat cgcgcgccga gaagncgggc gtccccacac tgaagggtccg 60
 gaaaggcgac ttccgggggc tttggcacct ggcggaccct cccggagcgt cggcacctga 120
 acgcgaggcg ctccattgcg cgtgcgtntg gaggggcttc ccgcacctga tcgcgagacc 180
 ccaacggctg gtgggcgtcg ctgcgcgtct tcggctgagc tgggccatgg cgcanttgtt 240
 gcgggctgag gcggacgcgg ncgttttttc gnccttgctg ggattcgctg ttncctctctn 300
 ggggttctgg gngggccgan cgagaacgca agcattcacg attt 344

<210> 82
 <211> 253
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (56)..(56)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature

<222> (137)..(137)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (145)..(145)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (159)..(159)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (233)..(233)
 <223> "n" is any nucleotide.

<400> 82
 ggaccctccc ggagcgtcgg cacctgaacg cgaggcctcc attgcggtgc gtgtgnaggg 60
 gcttcccgc cctgatcgcg agaccccaac ggctgggtggc gtcgctgcgc gtctcggctg 120
 agctggccat ggcgcantgt tgcgngctga ggcgccggnc gttttctcgc ctgctgggat 180
 cgctgctcct ctctggggtc ctggcgggccg accgagaacg cagcatccac gantttcttc 240
 tgggtgttcga agg 253

<210> 83
 <211> 419
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (20)..(20)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (26)..(26)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (95)..(95)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (292)..(292)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (313)..(315)
 <223> "n" is any nucleotide.

<400> 83
 ttagcgcggc tctgaacgcn agaagnggcc gttgagtgtc gcaggcggcg agggcgcgag 60
 tgaggagcag acccaggcat cgcgcgccga gaagncgggc gtccccacac tgaaggtccg 120
 gaaaggcgac ttccgggggc tttggcacct ggcggaccct cccggagcgt cggcacctga 180
 acgcgaggcg ctccattgcy cgtgcgtttg aggggcttcc cgcacctgat cgcgagaccc 240
 caacggctgg tggcgctgcc tgcgcgtctc ggctgagctg gccatggcgc antggtgcgg 300
 gcttgaggcg gannngccgt ttctgcctcg ctgggatcgc tgctcctctc tggggctctg 360
 gcggccgacc gagaacgcag catccacgac ttctgcctgg tgctgaaggt ggtgggcag 419

<210> 84
 <211> 477
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (27)..(27)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (139)..(139)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (223)..(223)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (232)..(232)
 <223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (302)..(302)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (310)..(310)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (322)..(322)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (328)..(328)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (357)..(357)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (375)..(375)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (392)..(392)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (398)..(398)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (405)..(405)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (427)..(427)

<223> "n" is any nucleotide.

<220>

<221> misc_feature

<222> (437)..(437)

<223> "n" is any nucleotide.

<220>

<221> misc_feature

<222> (449)..(449)

<223> "n" is any nucleotide.

<220>

<221> misc_feature

<222> (458)..(458)

<223> "n" is any nucleotide.

<220>

<221> misc_feature

<222> (474)..(474)

<223> "n" is any nucleotide.

<400> 84

agaccaggc atcgcggcc gagaagncgg gcgtcccccac actgaaggctc cggaaggcg 60

acttccgggg gctttggcac ctggcggacc ctcccgagc gtcggcacct gaacgcgagg 120

cctccattgc cgtgcgttng aggggcttcc cggaacttga tcgcgagacc ccaacggctg 180

gtggcgctgc tgcgcgtcct cggctgagct ggccatggcg cantggtgcc gngctgaggc 240

cggagggccg gtttctcgcc ttgctgggat cgtgctcct ctctggggtc ctggcggccg 300

ancgaagaan gcagcaatcc angaatttct gcttgggtgtt cgaaagtttg tgggcanatt 360

ccggggcctt catgnctaag gttggttgg anaatgtnaa ttaangattc ttgcaactgt 420

ttgtgtnatt ggggctntta aacggaaana caataatnac ctgaccaaag aagnaatt 477

<210> 85

<211> 393

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (361)..(361)

<223> "n" is any nucleotide.

<220>

<221> misc_feature
 <222> (367)..(367)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (384)..(384)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (390)..(390)
 <223> "n" is any nucleotide.

<400> 85
 ggccgggtcg tttctcgctt ggctgggacg gctgctctc tctgggggtcc tggccgggccg 60
 accgagaacg cagcatccac gacttctgcc tgggtgtcgaa ggtggtgggc agattccggg 120
 cctccatgcc taggtggtgg tacaatgtca ctgacggacg ctgccagctg tttgtgtatg 180
 ggggctgtga cggaacacgc aataattacc tgaccaagga ggagtgcctc aagaaatgtg 240
 ccactgtcac agagaatgcc acgggtgacc tggccaccag caggaatgca gcggattcct 300
 ctgtcccaag tgctcccaga aggcaggatt cttgaagacc acttcagcga tatgtttcaa 360
 ntattgnaag aataattgca ccgncaacgn att 393

<210> 86
 <211> 428
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (3)..(3)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (11)..(12)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (17)..(17)
 <223> "n" is any nucleotide.

<220>

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<221> misc_feature
<222> (48)..(48)
<223> "n" is any nucleotide.

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<220>
<221> misc_feature
<222> (425)..(425)
<223> "n" is any nucleotide.

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<400> 86
gcngcgcggt nntcgcntgc tgggatcgct gcacctctct ggggtcgngg cggccgaccg      60
agaacgcagc atccacgact tctgcctggt gtcgaagggt gtgggcagat gccgggcctc      120
catgcctagg tgggtggtaca atgtcactga cggatcctgc cagctgtttg tgtatggggg      180
ctgtgacgga aacagcaata attacctgac caaggaggag tgccctcaaga aatgtgccac      240
tgtcacagag aatgccacgg gtgacctggc caccagcagg aatgcagcgg attcctctgt      300
cccaagtgct ccagaaggc aggattctga agaccactcc agcgatatgt tcaactatga      360
agaatactgg caccgccaac gcattcactg ggcctgcgtg catccttccc acgctgggtac      420
tttgncgt                                         428

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<210> 87
<211> 425
<212> DNA
<213> Homo sapiens

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<220>
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<222> (7)..(7)
<223> "n" is any nucleotide.

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<220>
<221> misc_feature
<222> (403)..(403)
<223> "n" is any nucleotide.

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<220>
<221> misc_feature
<222> (409)..(409)
<223> "n" is any nucleotide.

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<400> 87
ctgggantcg ctgctcctct ctggggctct ggcggccgac cgagaacgca gcatccacga      60
cttctgcctg gtgtcgaagg tgggtgggcag atgccggggc tccatgccta ggtggtggta      120

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caatgtcact gacggatcct gccagctggt tgtgtatggg ggctgtgacg gaaacagcaa	180
taattacctg accaaggagg agtgcctcaa gaaatgtgcc actgtcacag agaatgccac	240
gggtgacctg gccaccagca ggaatgcagc ggattcctct gtcccaagtg ctcccagaag	300
gcaggattct gaagaccact ccagcgatat gttcaactat gaagaatact gcaccgcca	360
cgcagtcact ggggccttgc gtggaatcct ttcccacgct ggnaatttng acgttgagaa	420
ggaac	425

<210> 88
 <211> 343
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (48)..(48)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (62)..(62)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (211)..(211)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (232)..(232)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (245)..(245)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (309)..(309)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (318)..(318)

<223> "n" is any nucleotide.

<400> 88

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gattcggcac aggggaaaca gcaataatta cctgaccaag gaggagtncc tcaagaaatg      60
tncactgtc acagagaatg ccacgggtga cctggccacc agcaggaatg cagcggattc      120
ctctgtccca agtgctccca gaaggcagga ttctgaagac cactccagcg atatgttcaa      180
ctatgaagaa tactgcaccg ccaacgcagt nactggggcc ttgcgtggca tnccttccca      240
cgctngtact ttgacgtgga gaggaactcc tggcaataac ttcatttatg gaggcttgcc      300
ggggcaatna agaacagntt accgctcttt aggaggcctg cat                        343
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<210> 89

<211> 510

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (424)..(424)

<223> "n" is any nucleotide.

<220>

<221> misc_feature

<222> (481)..(481)

<223> "n" is any nucleotide.

<220>

<221> misc_feature

<222> (509)..(509)

<223> "n" is any nucleotide.

<400> 89

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gcaataatta cctgaccaag gaggagtgcc tcaagaaatg tgccactgtc acagagaatg      60
ccacgggtga cctggccacc agcaggaatg cagcggattc ctctgtccca agtctcccag      120
aaggcaggat tctgaagacc actccagcga tatgttcaac tatgaagaat actgcaccgc      180
caacgcagtc actgggcctt gccgtgcatc cttcccacgc tggctactttg acgtggagag      240
gaactcctgc aataacttca tctatggagg ctgccggggc aataagaaca gctaccgctc      300
tgaggaggcc tgcattgtcc gctgcttccg ccagcaggag aatcctcccc tgccccttgg      360
ctcaaaggtg gtggttcttg ccggggctgt ttcgtgatgg tgttgatcct tttcctgggg      420
agcntccatg gtcttactga ttccgggttg caaggaggaa ccaggagcgt gccctgcgga      480
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ncgtctggag cttcggagat gacaagggnt

510

<210> 90
<211> 293
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (257)..(257)
<223> "n" is any nucleotide.

<400> 90
gctaccgctc tgaggaggcc tgcattgctc gctgcttccg ccagcaggag aatcctcccc 60
tgcccccttg ctcaaagggt gtggttcttg cggggctgtt cgtgatggtg ttgatcctct 120
tcctggggag cctccatggt ctacctgac cgggtggcac ggaggaacc agggagcgtg 180
ccctgcgcac cgtctgggag ctccggagat gacaaggag cagctgggtg aagaacacat 240
atgttctgt tgaccgncct gttcgccaag aggattgggg gaaggagggg gga 293

<210> 91
<211> 282
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (19)..(19)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (147)..(147)
<223> "n" is any nucleotide.

<400> 91
ttccgccaag caggaaaant cctccctcc cccttggtc aaagggtgtg gttcctggcg 60
gggctgttcg tgatggtgtt gatccctcct tccggggagc ctccatggt cctaccctga 120
tccgggtggc acggaggaac ccaggancgt gccctgcga ccgtctggag ctccggagat 180
gacaaggagc agctggtgaa gaacacatat gtctgtgac cgccctgtcg ccaagaggac 240
tggggaaggg aggggagact atgtgtgagc tttttttaa ta 282

<210> 92
<211> 390

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<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (33)..(33)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (55)..(55)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (118)..(118)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (213)..(213)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (228)..(228)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (259)..(259)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (267)..(267)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (324)..(324)
<223> "n" is any nucleotide.

<220>
<221> misc_feature
<222> (333)..(333)
<223> "n" is any nucleotide.

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<220>
 <221> misc_feature
 <222> (344)..(344)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (387)..(387)
 <223> "n" is any nucleotide.

<400> 92
 gagaggaact cctgcaataa cttcatctat ggnggctgcc ggggaataag aacantacc 60
 gctctgagga ggctgcgtg ctccgctgct tccgctgtgt gttctcttcc aggccagcag 120
 gagaatcctc cctgcccct tggctcaaag gtgggtggtc tggcggggct gttcgtgatg 180
 gtgttgatcc tcttcctggg agcctccatg gtntacctga tccgggtngc acggaggaac 240
 cagggagcgt gccctgcgna ccgtctngga gctccggaga tgacaaggag cagctggtga 300
 agaacacata tgtcctgtga ccgncctggt cgncaagagg actnggggaa aggggagggg 360
 agattatgtg ttgagttttt tttaaantag 390

<210> 93
 <211> 406
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (306)..(306)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (328)..(328)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (342)..(342)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (365)..(365)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (370)..(370)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (377)..(377)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (382)..(382)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (402)..(402)
 <223> "n" is any nucleotide.

<400> 93
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 tccgctgctt ccgccagcag gagaatcctc ccctgccctt tggetcaaag gtggtgggttc 120
 tggcggggct gtctgtgatg gtgttgatcc tcttcctggg agcctccatg gtctacctga 180
 tccgggtggc acggaggaac cagggagcgt gccctgcgca ccgtctggga gctccggaga 240
 tgacaaggga gcagctggtg aagaacacat atgttcctgt tgaccgccct gtctcgccaag 300
 agggantggg ggaaggggag ggggaganta ttgttggtga gntttttttt aaaattagga 360
 ggggnttgan ttcgggnttt tnagttgatc catttagggg gntgag 406

<210> 94
 <211> 360
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (1)..(1)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (142)..(142)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (339)..(339)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (347)..(347)
 <223> "n" is any nucleotide.

<400> 94
 nggccttgca gtgctccgct gcttccgcca gcaggagaat cctcccctgc cccttggtc 60
 aaaggtggtg gttctggcgg ggctgttcgt gatggtgttg atcctcttcc tgggagcctc 120
 catggtctac ctgatccggg tngcacggag gaaccaggag cgtgccctgc gcaccgtctg 180
 gagctccgga gatgacaagg agcagctggt gaagaacaca tatgtcctgt gaccgccctg 240
 tcgccaagag gactggggaa gggaggggag actatgtgtg agcttttttt aaatagaggg 300
 attgactcgg atttgagtga tcattagggc tgaggtctnt ttctctngga ggtaggacga 360

<210> 95
 <211> 438
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (334)..(334)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (368)..(368)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (376)..(376)
 <223> "n" is any nucleotide.

<400> 95
 cggggctggt cgtgatggtg ttgatacctt tcttgggagc ctccatgggc tacctgatcc 60
 ggggtggcacg gaggaaccag gagcgtgccc tgcgcaccgt ctggagctcc ggagatgaca 120
 aggagcagct ggtgaagaac acatatgtcc tgtgaccgcc ctgtcgcaa gaggactggg 180
 gaagggaggg gagactatgt gtgagctttt tttaaataga gggattgact cggatttgag 240

tgatcattag ggctgaggtc tgtttctctg ggaggtagga cggctgcttc ctgggtcttg	300
gcaggggatgg ggtttgcttt gggaaatcct cttnnggaggc tcttccttcg catgggcctt	360
gcagtctnng cagcancccc cgagtttttt tcttcgctg atccgatttc tttcctcca	420
ggtaagaatt tttctttt	438

<210> 96
 <211> 448
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (108)..(108)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (261)..(261)
 <223> "n" is any nucleotide.

<400> 96 ggaaccagg agcgtgccct gcgcaccggt ctggagctcc ggagatgaca aggagcagct ggtgaagaac acatatgtcc tgtgaccgcc ctgtcgccaa gaggactnng gaaggagggg gagactatgt gtgagctttt tttaaataga gggattgact cggatttgag tgatcattag ggctgaggtc tgtttctctg ggaggtagga cggctgcttc ctggtctggc agggatgggt ttgctttgga gaatcctcta ngaggctcct cctcgcatgg cctgcagtct ggcagcagcc ccgagttggt tcttcgctga tcgatttctt tctccaggt agagttttct ttgcttatgt tgaattccat tgccctcttt ctcacacag aagtgatgtt ggaatcgttt cttttgtttt gtctgattta tgggtttttt ttaagtat	60 120 180 240 300 360 420 448
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<210> 97
 <211> 331
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (20)..(20)
 <223> "n" is any nucleotide.

<220>


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<221> misc_feature
<222> (30)..(30)
<223> "n" is any nucleotide.

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<400> 97
attagggctg aggtctgttn ctctgggagn taggacggct gccttcctgg tctggcaggg      60
atggggtttgc tttggaaatc ctctaggagg ctctctctcg catggcctgc agttctgcag      120
cagccccgag ttgtttcctc gctgatcgat ttctttcctc caggtagagt tttctttgct      180
tatgttgaat tccattgcct cttttctcat cacagaagtg atgttggaat cgtttctttt      240
gtttgtctga tttatggttt ttttaagtat aaacaaaagt tttttattag cattctgaaa      300
gaaggaaagt aaaatgtaca agtttaataa a                                     331

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<210> 98
<211> 373
<212> DNA
<213> Homo sapiens

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<220>
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<222> (45)..(45)
<223> "n" is any nucleotide.

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<220>
<221> misc_feature
<222> (102)..(102)
<223> "n" is any nucleotide.

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<220>
<221> misc_feature
<222> (105)..(105)
<223> "n" is any nucleotide.

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<220>
<221> misc_feature
<222> (159)..(159)
<223> "n" is any nucleotide.

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<220>
<221> misc_feature
<222> (174)..(174)
<223> "n" is any nucleotide.

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<220>
<221> misc_feature
<222> (213)..(213)

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<223> "n" is any nucleotide.

<220>

<221> misc_feature

<222> (337)..(337)

<223> "n" is any nucleotide.

<400> 98

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gattgactcg gatttgagtg atcattaggg ctgagggtctg tttcnctggg aggtaggacg      60
gctgctcccc tggctctggca gggatggggtt tgctttggaa anccnctagg aggctcctcc    120
tcgcatggcc tgcagtctgg cagcagcccc gagttgttnc ctgctgatc gatntctttc      180
ccccaggtag agttttcttt gcttatgttg aantccattg cctcttttct catcacagaa      240
gtgatgttgg aatcgtttct tttgtttgtc tgatttatgg tttttttaag tataaacaaa      300
agttttttat tagcattctg aaagaaggaa agtaaaantgt acaagtttaa taaaaagggg      360
ccttccccctt taa                                                         373
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<210> 99

<211> 380

<212> DNA

<213> Homo sapiens

<400> 99

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gattgactcg gatttggagt gatcattagg gctgagggtct gtttctctgg gaggtaggac      60
ggctgcttcc tggctctggca gggatggggtt tgctttggaa atcctctagg aggctcctcc    120
ttcgcattggc ctgcagtctg gcagcagccc cgagttgttt cctcgtgat cgatttcttt      180
cctccaggta gagttttctt tgcttatgtt gaattccatt gcctcttttc tcatcacaga      240
agtgatgttg gaatcgtttc ttttgtttgt ctgatttatg gtttttttaa gtataaacia      300
aagtttttta ttagcattct gaaagaagga aagtaaaatg tacaagttta ataaaaaggg      360
gccttccccct ttagaataaa                                                         380
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<210> 100

<211> 320

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (304)..(304)

<223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (309)..(309)
 <223> "n" is any nucleotide.

<400> 100
 tctggcaggg atgggtttgc tttggaaatc ctctaggagg ctctctctcg catggcctgc 60
 agtctggcag cagcccgagt tgtttcctcg ctgacgatt tctttcctcc aggtagagtt 120
 ttctttgctt atgttgaatt ccattgcctc ttttctcatc acagaagtga tgttggaatc 180
 gtttcttttg tttgtctgat ttatggtttt tttaagtata aacaaaagtt ttttattagc 240
 attctgaaag aaggaaagta aaatgtacaa gtttaataaa aaggggcctt cccctttagg 300
 aatnaaaaana aaaaagggtg 320

<210> 101
 <211> 397
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (24)..(24)
 <223> "n" is any nucleotide.

<400> 101
 gattgactcg gatttgagtg atcnattagg gctgaggtct gtttctctgg gaggtaggac 60
 ggctgcttca tggctctggca gggatgggtt tgctttggaa atcctctagg aggctcctcc 120
 tcgcatggcc tgcagtctgc agcagccccg agttgtttcc tcgctgatcg atttctttcc 180
 tccaggtaga gttttctttg cttatgttga attccattgc ctcttttctc atcacagaag 240
 tgatgttgga atcgtttctt ttgtttgtct gatttatggt ttttttaagt ataaacaaaa 300
 gttttttatt agcattctga aagaaggaaa gtaaaatgta caagtttaat aaaaaggggc 360
 cttccccctt agaataaatt tcagcatgtg ctttcaa 397

<210> 102
 <211> 289
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (61)..(61)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (74)..(74)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (122)..(122)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (184)..(184)
 <223> "n" is any nucleotide.

<400> 102
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 ncgatttctt tccnccaggt agagttttct ttgcttatgt tgaattccat tgcctctttt 120
 cncatcacag aagtgatggt ggaatcggtt cttttgtttg tctgatttat ggttttttta 180
 agntaaaca aaagtttttt attagcattc tgaaagaagg aaagtaaaat gtacaagttt 240
 aataaaaagg ggccttcccc tttagaataa aaaaaaaaaa aaaaaaaaaa 289

<210> 103
 <211> 311
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (7)..(7)
 <223> "n" is any nucleotide.

<400> 103
 cttttgnaaa tcctctagga ggctcctcct cgcattggcct gcagtctgca gcagccccga 60
 gttgtttcct cgctgatcgg atttctttcc tccaggtaga gttttctttg cttatgttga 120
 attccattgc ctcttttctc atcacagaag tgatgttgga atcgtttctt ttgtttgtct 180
 gatttatggt ttttttaagt ataaacaaaa gttttttatt agcattctga aagaaggaaa 240
 gtaaaatgta caagtttaat aaaaaggggc cttccccttt agaataaatt tcagcatgtg 300
 ctttcaaaaa a 311

<210> 104

<211> 338
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (32)..(32)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (67)..(67)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (136)..(136)
 <223> "n" is any nucleotide.

<400> 104
 ggtctggcag ggatggggtt gcctttggaa ancctctagg aggtcctcc tcgcatggcc 60
 tgcagtnctg gcagcagacc ccgagttggt tcctcgctga tcgatttctt taccgccagg 120
 tagagttttc ctttgnctta tgttgaattc cattgcctct tttactcatc acagaagtga 180
 tggttgaatc gtttcttttg tttgtctgat ttatggtttt ttttaagtata aacaaaagtt 240
 ttttattagc attctgaaag aaggaaagta aaatgtacaa gtttaataaa aaggggcctt 300
 cccctttaga ataaaaaaaa aaaaaaaaaa aaaaaaaaaa 338

<210> 105
 <211> 343
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (13)..(13)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (19)..(19)
 <223> "n" is any nucleotide.

<220>
 <221> misc_feature
 <222> (107)..(107)
 <223> "n" is any nucleotide.

<400> 105
ccctgggtcc tgncaaggna tgggggtttgc tttggaaatc ctottaggag gctcctcctc 60
gcatggcctg cagtctggca gcagccccga gttgtttcct cgctgancga tttctttcct 120
ccaggtagag ttttctttgc ttatgttgaa ttccattgcc tcttttctca tcacagaagt 180
gatgttgga tctgtttctt tgtttgtctg atttatgggt tttttaagta taaacaaaag 240
ttttttatta gcattctgaa agaaggaaa taaaatgtac aagtttaata aaaaggggcc 300
ttccccttta gaataaaaaa aaaaaaaaaa aaaaaaaaaa aaa 343

1